

equivalents of the disclosed concepts such as those which readily occur to one skilled in the art shall be included within the scope of the claims which are appended hereto.

What is claimed is:

1. An optical fiber connector assembly comprising:
  - a. a fiber optic connector having:
    - i. a connector housing having a leading end;
    - ii. at least a first ferrule and a second ferrule contained within said connector housing with;
      - A. said first and second ferrules positioned in parallel, spaced-apart alignment at said leading end, and
      - B. said ferrules having exposed ends at said leading end;
    - iii. said connector housing including a first mating fastener exposed on exterior sides of said connector housing, said first mating fastener including a clip receiving detent formed on exposed external surfaces of said connector housing;
  - b. a fiber optic adapter having:
    - i. an adapter housing having an open end sized to slidably receive said leading end of said connector housing with said connector housing moving toward a full insert position in a path of travel parallel to said ferrules;
    - ii. at least a first and a second parallel sleeves contained within said adapter housing and positioned for said first and second sleeves to slidably receive respective ones of said first and second ferrules as said connector housing is moved toward said full insert position;
    - iii. a second mating fastener including a clip on said adapter housing and exposed to an interior of said housing to releasably mate with said first mating fastener when said connector housing is moved to said full insert position; and
    - iv. walls of said adapter housing having recesses at least partially formed therethrough, said clips at least partially disposed within said recesses and said clips movable into said recesses as said clips are deflected in response to insertion of said leading end of said connector housing into said adapter housing.
2. An assembly according to claim 1 wherein: said adapter housing includes substantially identical first and second halves each having an individual one of said external clips.
3. An assembly according to claim 2 wherein: said sleeves are supported in a sleeve sub-assembly having means for securing said sub-assembly within said adapter housing as said first and second halves are joined together.
4. An assembly according to claim 3 wherein said sub-assembly includes:
  - a sleeve housing having first and second parallel bores formed therethrough;
  - said first and second sleeves retained within respective ones of said bores;
  - said sleeve housing having a flange received within a groove formed in said first and second halves.
5. An assembly according to claim 1 wherein: said first and second ferrules are slidable independent of one another within said connector housing in a sliding path parallel to longitudinal axes of said ferrules.
6. An assembly according to claim 5 further comprising: first and second spring means for separately urging said first and second ferrules outwardly from said leading end.

7. An assembly according to claim 1 wherein: said connector housing includes an internal housing slidably received within an external housing; said first mating fastener disposed on said internal housing;
- said external housing having an opening formed therethrough to expose said first mating fastener.
8. An assembly according to claim 7 wherein: said external housing includes release means for releasing said first and second mating fasteners upon separating, sliding movement of said external housing relative to said internal housing.
9. A fiber optic connector for releasably coupling with a fiber optic adapter where said adapter includes:
  - a. an adapter housing having an open and exposing an adapter interior;
  - b. at least a first and a second parallel sleeves contained within said adapter housing and positioned with open ends of said first and second sleeves exposed to said open end of said adapter housing; and
  - c. an adapter mating fastener including clips on said adapter housing and exposed to said adapter interior;
 said connector comprising:
  - a. a connector housing having a leading end sized to be received with said adapter open end;
  - b. at least a first ferrule and a second ferrule contained within said connector housing with;
    - i. said first and second ferrules positioned in parallel, spaced-apart alignment at said leading end, and
    - ii. said ferrules having exposed ends at said leading end and positioned to be slidably received in respective one of said first and second sleeves as said connector housing is inserted into said adapter interior through said adapter open end;
  - c. said connector housing including a connector mating fastener exposed on exterior sides of said connector housing to releasably mate either said adapter mating fastener as said connector housing is inserted into said adapter interior through said adapter open end; and
  - c. said connector mating fastener including clip receiving detents on exposed external surfaces of said connector housing and positioned to mate with said clips when said connector housing is inserted into said adapter to a full insert position.
10. A connector according to claim 9 wherein: said first and second ferrules are slidable independent of one another within said connector housing in a sliding path parallel to longitudinal axes of said ferrules.
11. A connector according to claim 10 further comprising: first and second spring means for separately urging said first and second ferrules outwardly from said leading end.
12. A connector according to claim 9 wherein: said connector housing includes an external housing slidably received within an external housing; said connector mating fastener disposed on said internal housing;
- said external housing having an opening formed therethrough to expose said first mating fastener.
13. A connector according to claim 12 wherein: said external housing includes release means for releasing said first and second mating fasteners upon separating, sliding movement of said external housing relative to said internal housing.

14. An fiber optic adapter for releasably coupling with a fiber optic connector where said connector includes:

- a. a connector housing having a leading end;
  - b. at least a first ferrule and a second ferrule contained within said connector housing with;
    - i. said first and second ferrules positioned in parallel, spaced-apart alignment at said leading end, and
    - ii. said ferrules having exposed ends at said leading end;
  - c. said connector housing including a first mating fastener exposed on exterior sides of said connector housing, said first mating fastener including clip receiving detents formed on exposed external surfaces of said connector housing;
- said adapter comprising:
- a. an adapter housing having an open end sized to slidably receive said leading end of said connector housing with said connector housing moving toward a full insert position in a path of travel parallel to said ferrules;
  - b. at least a first and a second parallel sleeves contained within said adapter housing and positioned for said first and second sleeves to slidably receive respective ones of said first and second ferrules as said connector housing is moved toward said full insert position;
  - c. a second mating fastener exposed to an interior of said adapter housing to releasably mate with said first mating fastener when said connector housing is moved to said full insert position;

d. said second mating fastener including clips on said adapter housing positioned to mate with said detents as said connector housing is inserted into said open end of said adapter housing to a full insert position; and

e. walls of said adapter housing including recesses at least partially formed therethrough sized to receive said clips as said clips are deflected in response to insertion of said leading end of said connector housing into said adapter housing.

15. An adapter according to claim 14 wherein:

said adapter housing includes substantially identical first and second halves each having an individual one of said external clips.

16. An adapter according to claim 15 wherein:

said sleeves are supported in a sleeve sub-assembly having means for securing said sub-assembly within said adapter housing as said first and second halves are joined together.

17. An adapter according to claim 16 wherein said sub-assembly includes:

a sleeve housing having first and second parallel bores formed therethrough;

said first and second sleeves retained within respective ones of said bores;

said sleeve housing having a flange received within a groove formed in said first and second halves.

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